

Work Order ID 140438

Wednesday, December 23, 2015 3:23:50 PM

140438

Page 1

Item ID: D350-607-431

Accept

N900040100Setup Start ***NS1***

Revision ID:

Item Name: Strut Retrofit

Stop ***NS2***

Start Date: 1/18/2016 Start Qty: 1.00

1

Cust Item ID:

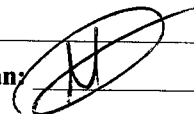
Required Date: 1/22/2016 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals:

Process Plan: 

Date: 12-13

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr

Revision Nbr

DSI9699

A

IIN-D350-607-4

C

DAS
6
9-89

MCS 1601-21

110

Document Control

0.00

110

DOCUMENT CONTROL

DC

Memo

0.00

Doc.Control -USB or Paperwork

Photocopy bluefile & type labels per PPP D350-607-431 CHG003

JAN 15 2016

120

Pick Kit

0.00

120

Packaging

Memo

0.00

Packaging

DAS
6
9-89DAS
28
9-89

JAN 20 2016

JAN 15 2016

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY							
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong	☐
Design	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions	☐
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance	☐
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect	☐
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing	☐
Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved	☐
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing	☐
Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish	☐
LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread	☐
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence	☐
Past Expiry Date	☐	Manufacturing Process	☐	OTHER : _____							
Misidentified	☐	Past Due	☐								

Work Order ID 140438

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140438

Page 2

Item ID: D350-607-431

Accept

N900040100Setup Start ***NS1***

Revision ID:

Item Name: Strut Retrofit

Stop ***NS2***

Start Date: 1/18/2016 Start Qty: 1.00

1

Cust Item ID:

Required Date: 1/22/2016 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start ***NR1***Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	QC4- 100% Inspect kits for completeness	0.00							
130									
QC	Memo	0.00							
Quality Control									
140	Packaging	0.00							
140									
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPP D350-607-431 Location: FG128								
150	QC21- Final Inspection - Work Order Release	0.00							
150									
QC	Memo	0.00							
Quality Control									

JAN 15 2016

DAS
27
9-89
JAN 15 2016

MCS JAN 26 2016

20100121

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

Picklist Print

Wednesday, December 23, 2015 3:23:54 PM

Page 1

Work Order ID: 140438

140438

Parent Item: D350-607-431

D350-607-431

Parent Item Name: Strut Retrofit

Start Date: 1/18/2016

Required Date: 1/22/2016

Start Qty: 1.00

Required Qty: 1.00

Comments:

IPP REV:A 13.12.30 NEW ISSUE DD VERF: RQ
REV:B 14.02.03 D350-607-4 REV.C DD VERF:JLM
14.06.10 AS PER ECN14-572 DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3910-7 *D3910-7* Crosstube Lug		Manufactured	No				Each	19.0000		1			
									**	129734		DAS 6 9-89	DAS 28 9-89
				<u>Location</u>			<u>Loc Qty</u>	<u>Loc Code</u>					
				ST524			19						
					133914		7						
					138055		12						
D3501-1 *D3501-1* Bushing		Manufactured	No				Each	131.0000		8			
									**				
				<u>Location</u>			<u>Loc Qty</u>	<u>Loc Code</u>				DAS 6 9-89	DAS 28 9-89
				ST039			131						
					135918		123						
					135919		8						
D3910-5 *D3910-5* Crosstube Lug		Manufactured	No				Each	17.0000		1			
									**				
				<u>Location</u>			<u>Loc Qty</u>	<u>Loc Code</u>				DAS 6 9-89	DAS 28 9-89
				ST524			17						
					134017		5						
					138054		12						

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐			
Design ☐	☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐			
Doc/Data ☐	☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐			
Equip/Tooling ☐	☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐			
Handling/Pre ☐	☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐			
Material ☐	☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐			
Internal Transport ☐	☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐			
Tribal Knowledge ☐	☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐			
LOA ☐	☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐			
Substation ☐	☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐			
Past Expiry Date ☐	☐	Manufacturing Process ☐	OTHER :						
Misidentified ☐	☐	Past Due ☐							

Picklist Print

Wednesday, December 23, 2015 3:23:55 PM

Page 2

Work Order ID: 140438

140438

Parent Item: D350-607-431

D350-607-431

Parent Item Name: Strut Retrofit

Start Date: 1/18/2016

Required Date: 1/22/2016

Start Qty: 1.00

Required Qty: 1.00

D3984

Manufactured No

f

12.0000

D3984

Rubber Extrusion, X-Tube, Per Foot

**

2
B139666

DAS

6

9-89

DAS

28

9-89

27

9-89

Location

Loc Qty

Loc Code

ST413

12

132156

12

(D3984-030) CUT QTY OF 8 AT 3.00"

D4775-041

Manufactured No

Each

13.0000

D4775-041

Strut Assembly

**

2
139625

DAS

6

9-89

DAS

28

9-89

Location

Loc Qty

Loc Code

ST514

13

139044

13

DAS
D4776-27

Manufactured No

Each

11.0000

D4776-27

Skidtube Clevis

**

2
139524

DAS

6

9-89

DAS

28

9-89

Location

Loc Qty

Loc Code

ST124

11

137658

11

DAS
D4917-300

Manufactured No

Each

17.0000

D4917-300

Placard, Max Load

**

1

JAN 25 2016

DAS

6

9-89

Location

Loc Qty

Loc Code

ST137

17

137895

5

138526

12

DAS

27

9-89

JAN 20 2016

DAS

28

9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
		OTHER : ☐							

Picklist Print

Wednesday, December 23, 2015 3:23:55 PM

Page 3

Work Order ID: 140438

Parent Item: D350-607-431

Parent Item Name: Strut Retrofit

140438

D350-607-431

Start Date: 1/18/2016

Required Date: 1/22/2016

Start Qty: 1.00

Required Qty: 1.00

D4917-310

Manufactured No

Each

20.0000

D4917-310

Placard, Max Load

DAS
27
9-89

Location

Loc Qty

Loc Code

ST137

20

128443

10

138938

10

D4917-315

Manufactured No

Each

11.0000

D4917-315

Placard, Max Load

DAS
27
9-89

Location

Loc Qty

Loc Code

ST137

11

134787

11

D4917-320

Manufactured No

Each

19.0000

D4917-320

Placard, Max Load

DAS
27
9-89

Location

Loc Qty

Loc Code

ST137

19

127309

8

138529

11

D4917-332

Manufactured No

Each

7.0000

D4917-332

Placard, Max Load

DAS
27
9-89

Location

Loc Qty

Loc Code

ST137

7

127559

7

DAS
28
9-89
JAN 20 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval	
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	☐ No Re-verification	☐ Pressure/Forced	☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong				
Design ☐	☐ Operator	☐ Bending	☐ Set-up	☐ Folio/Program	☐ Outside Dimensions				
Doc/Data ☐	☐ Offset/Setup	☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance				
Equip/Tooling ☐	☐ Supplier	☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Part Incorrect				
Handling/Pre ☐	☐ Training	☐ Crimp/Kink/Ripple/Wave	☐ Inspection Incomplete/Unqualified	☐ Wrong Stock Pulled	☐ Part Lost/Missing				
Material ☐	☐ Use for Testing	☐ Cuffs	☐ Contamination	☐ Out of Sequence	☐ Part Moved				
Internal Transport ☐	☐ Poor Information	☐ Crushing	☐ Countersink	☐ Off-set	☐ Drawing				
Tribal Knowledge ☐	☐ Rushing	☐ Heat Treat	☐ Cut Too Short	☐ Mislabeled	☐ Finish				
LOA ☐	☐ Product Improvement	☐ Wave/Twist in Tube	☐ Instructions Incomplete/Unclear	☐ Fit/Function	☐ Misread				
Substation ☐	☐ Process Improvement	☐ Marks/Chatter	☐ Drill Holes	☐ Misaligned/off center	☐ Turning Sequence				
Past Expiry Date ☐	☐ Manufacturing Process	OTHER :							
Misidentified ☐	☐ Past Due								

Picklist Print

Wednesday, December 23, 2015 3:23:55 PM

Page 4

Work Order ID: 140438

Parent Item: D350-607-431

Parent Item Name: Strut Retrofit

140438

D350-607-431

Start Date: 1/18/2016

Required Date: 1/22/2016

Start Qty: 1.00

Required Qty: 1.00

AN4-14A
AN4-14A
Bolt

Purchased No

Each 378.0000

**

12

DAS
5
9-89
DAS
28
9-89

Location

Loc Qty

Loc Code

FG

5

122141

5

ST344

373

M133316

15

M133769

358

Each

72.0000

**

12
4

DAS
6
9-89
DAS
28
9-89

AN4-42A
AN4-42A
Bolt

Purchased No

Location

Loc Qty

Loc Code

over003

25

M133790

25

over004

25

M133577

25

ST341

22

M133483

22

Each

38.0000

**

2

DAS
6
9-89

AN6-13A
AN6-13A
BOLT

Purchased No

Location

Loc Qty

Loc Code

over005

25

m133577

25

ST335

13

m132825

13

JAN 20 2016

DAS
28
9-89

DAS
27
9-89

DAS
28
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
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Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐			
Design ☐	☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐			
Doc/Data ☐	☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐			
Equip/Tooling ☐	☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐			
Handling/Pre ☐	☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐			
Material ☐	☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐			
Internal Transport ☐	☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐			
Tribal Knowledge ☐	☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐			
LOA ☐	☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐			
Substation ☐	☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐			
Past Expiry Date ☐	☐	Manufacturing Process ☐	OTHER : _____						
Misidentified ☐	☐	Past Due ☐							

Picklist Print

Wednesday, December 23, 2015 3:23:55 PM

Page 5

Work Order ID: 140438

Parent Item: D350-607-431

Parent Item Name: Strut Retrofit

140438

D350-607-431

Start Date: 1/18/2016

Required Date: 1/22/2016

Start Qty: 1.00

Required Qty: 1.00

MS21042L4

Purchased

No

Each

2,884.000

MS21042L4

Locknut

**

16
133769

CAS
27
9-89

Location

Loc Qty

Loc Code

FP001

41

m133363

41

GA

26

m127813

26

ST260a

56

m130799

56

ST303

2664

m133769

2664

ST305

97

m130922

97

Each

156.0000

**

2

DAS
6
8-89
DAS
28
9-89

MS21042L6

Purchased

No

MS21042L6

Nut

CAS
27
9-89

Location

Loc Qty

Loc Code

ST303

135

m131624

6

m133134

100

m133577

29

ST305

4

m132262

4

t260a

17

m131317

17

DAS
6
9-89
DAS
28
9-89

JAN 20 2016

Wednesday, December 23, 2015 3:23:55 PM

Shop Packet Print

Page 5

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
Date :		Step #:		QTY Effective :				MRB (QS1042) Approval																																																									
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval																																																									
Root Cause		FAULT CATEGORY																																																															
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER : ☐			
Misidentified ☐	Past Due ☐																																																																

Picklist Print

Wednesday, December 23, 2015 3:23:55 PM

Page 6

Work Order ID: 140438

Parent Item: D350-607-431

Parent Item Name: Strut Retrofit

140438

D350-607-431

Start Date: 1/18/2016

Required Date: 1/22/2016

Start Qty: 1.00

Required Qty: 1.00

NAS1149F0432P

Purchased

No

Each

457.0000

NAS1149F0432P

WASHER

DAS
27
9-89

Location

Loc Qty

Loc Code

ST262

297

M133709

297

st268

160

M128995

35

M132677

125

Each

131.0000

NAS1149F0663P

Purchased

No

NAS1149F0663P

WASHER

DAS
27
9-89

Location

Loc Qty

Loc Code

st268

131

M132823

131

**

24
133938

DAS
6
9-89

DAS
28
9-89

**

4
133515

DAS
6
9-89

DAS
28
9-89

JAN 20 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QS1042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS D350-607-3 Rev.D,
INSTALLATION INSTRUCTIONS D350-607-4 Rev. C AND
INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ICA-D350-607 REV. 6

REF TCCA STC: SH94-14

REF FAA STC: SR00213NY

REF EASA STC: EASA.10016996

REF BRAZILIAN STC: 2007S03-03/-04/-05/-06

1.0 PURPOSE

This service instruction provides parts and instructions to facilitate installation of forward Basket Strut for customers that have purchased: D350-607-501 Conversion Kit @ CHG 004, D350-607-511 Quick Release Basket Mounting Kit @ CHG 004, D350-607-541 @ CHG 006, D350-607-543 @ CHG 007, D350-607-545 @ CHG 006, D350-607-547 @ CHG 007 Heli-Utility-Baskets as well as the D350-607-431 Strut Retrofit Kit and the D350-607-641 Long Cargo Tube @ CHG 001.

2.0 PARTS LIST:

Modify the quantities for D3910-5 and add D3910-7 as follows:

QTY -541	QTY -543	QTY -545	QTY -547	QTY -511	QTY -501	PART NUMBER	DESCRIPTION
X						D350-607-541	HELI-UTILITY-BASKET @ CHG 007 OR LATER
	X					D350-607-543	HELI-UTILITY-BASKET @ CHG 008 OR LATER
		X				D350-607-545	HELI-UTILITY-BASKET @ CHG 007 OR LATER
			X			D350-607-547	HELI-UTILITY-BASKET @ CHG 005 OR LATER
1	1	1	1	X		D350-607-511	QUICK RELEASE BASKET MOUNTING KIT @ CHG 005 OR LATER
					X	D350-607-501	CONVERSION KIT @ CHG 005 OR LATER
				1	1	D3910-5	X-TUBE LUG
				1	1	D3910-7	X-TUBE LUG

(ADD)

QTY -413	QTY -415	QTY -417	QTY -419	QTY -431	PART NUMBER	DESCRIPTION
X					D350-607-413	HEAVY DUTY LID KIT (LONG)
	X				D350-607-415	HEAVY DUTY LID KIT (SHORT)
		X			D350-607-417	LIGHTWEIGHT LID KIT (LONG)
			X		D350-607-419	LIGHTWEIGHT LID KIT (SHORT)
				X	D350-607-431	STRUT RETROFIT KIT @ CHG 005 OR LATER
				1	D3910-5	X-TUBE LUG
				1	D3910-7	X-TUBE LUG

(ADD)

QTY -641	QTY -611	QTY -511	QTY -431	PART NUMBER	DESCRIPTION
X				D350-607-641	QUICK RELEASE LONG CARGO TUBE
1	X			D350-607-611	LONG CARGO TUBE
1		X		D350-607-511	QUICK RELEASE BASKET MOUNTING KIT @ CHG 005 OR LATER
			X	D350-607-431	STRUT RETROFIT KIT @ CHG 005 OR LATER
		1	1	D3910-5	X-TUBE LUG
		1	1	D3910-7	X-TUBE LUG

(ADD)

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: 
D. SHEPHERD (DE # 02)

DATE: 14.05.16
CERT. NO.: SH94-14
ISSUE NO.: 6

A	NEW ISSUE	AJS	14.05.16
REV.	DESCRIPTION	BY	DATE
DESIGN	AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED		DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9699	SHEET 1 OF 2
APPROVED		TITLE	SCALE
DE APPR.		LUG REPLACEMENT	NTS
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3.0 PROCEDURE:

Install the D350-607-501 Conversion Kit, D350-607-511 Quick Release Mounting Kit or D350-607-431 Strut retrofit kit per Installation Instructions D350-607-3 Rev. D or D350-607-4 Rev. C. While installing the Forward Strut perform the following:

3.1 Substitute the Forward Lower D3910-5 X-Tube Lug with the D3910-7 X-Tube Lug as shown in Figure 1.

3.2 Install the forward D4775-041 Strut Assembly. Transfer mark from the upper hole on the clevis of the D4775-041 Strut Assembly to the D3910-7 X-tube Lug and drill thru the lug $\varnothing 0.257$ - $\varnothing 0.261$ as shown in Figure 1. Touch up chemical conversion coating per MIL-DTL-5541. Check the witness holes located at the bottom end of the D4775-041 Strut Assemblies to ensure that the thread from the rod end extends past the witness hole.
Torque MS21042L4/-4 nuts to 50-70 in-lbs (5.7-7.9 N-m). Torque MS21042L6/-6 nuts to 160-190 in-lbs (18.1-21.5 N-m).

3.3 Complete the installation in accordance with Installation Instructions D350-607-3 Rev. D or D350-607-4 Rev. C.

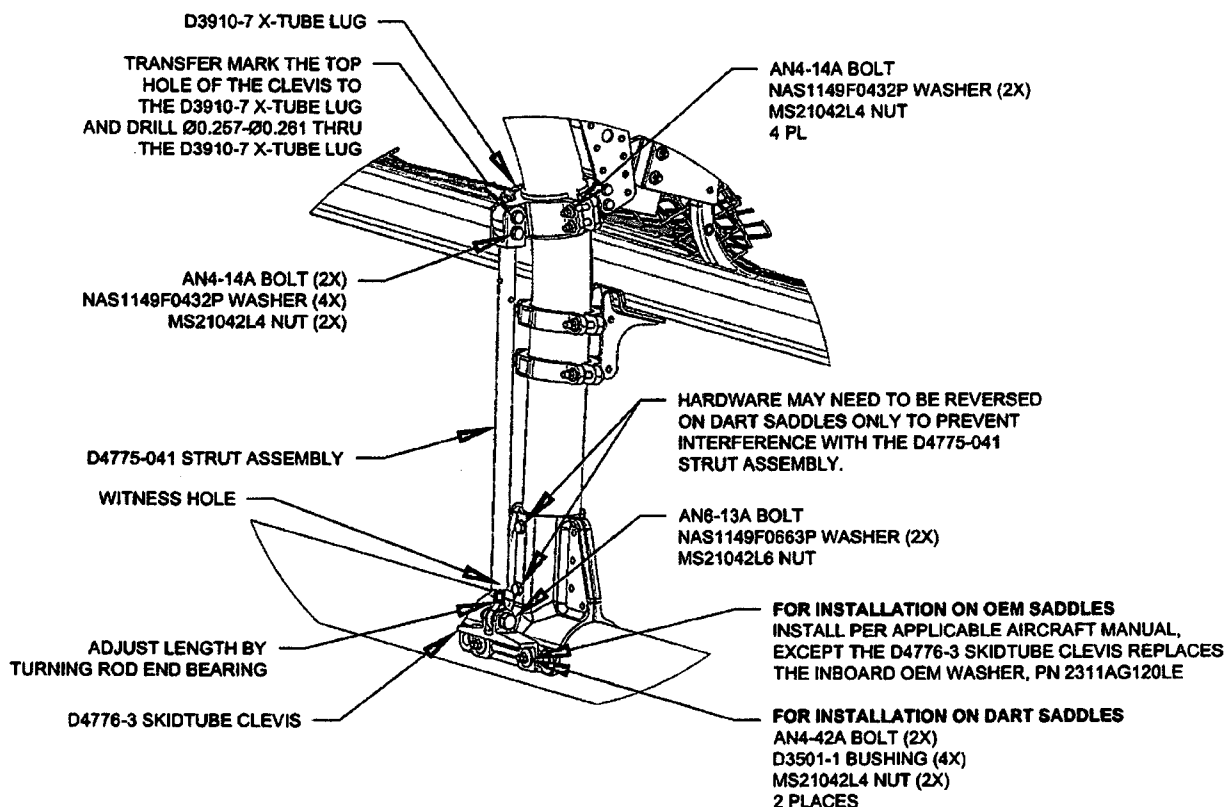


FIGURE 1: INSTALLATION OF D4775-041 FWD STRUT

4.0 WEIGHT AND BALANCE:

There is no weight and balance change associated with this update.

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: *[Signature]*
D. SHEPHERD (DE # 02)

DATE: 14.05.16
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DESIGN	AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9699	SHEET 2 OF 2
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	LUG REPLACEMENT	NTS
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5.0 PARTS LIST

REFERENCE ONLY

QTY -641	QTY -611	QTY -511	QTY -431	PART NUMBER	DESCRIPTION
X				D350-607-641	QUICK RELEASE LONG CARGO TUBE
1	X			D350-607-611	LONG CARGO TUBE
1		X		D350-607-511	QUICK RELEASE BASKET MOUNTING KIT
			X	D350-607-431	STRUT RETROFIT KIT
		8	8	D3501-1	BUSHING
		2		D3910-3	X-TUBE LUG
		2	2	D3910-5	X-TUBE LUG
1				D3912-041	EYEBOLT RECEIVER ASSY
4				D3917-3	WASHER
		8	4	D3984-030	RUBBER EXTRUSION, X-TUBE
		1		D4148-041	FWD X-TUBE LUG ASSY
		1		D4149-041	AFT X-TUBE LUG ASSY
1				D4151-043	BASKET FWD HARDPOINT ASSY (UPPER)
		2	2	D4775-041	STRUT ASSEMBLY
		2	2	D4776-3	SKIDTUBE CLEVIS
1				D4874-041	CARGO TUBE ASSEMBLY
1				D4875-043	CARGO TUBE AFT STRUT
1				D4875-045	FWD ATTACHMENT CLEVIS
			1	D4917-300	PLACARD MAX LOAD
			1	D4917-310	PLACARD MAX LOAD
			1	D4917-315	PLACARD, MAX LOAD
			1	D4917-320	PLACARD, MAX LOAD
			1	D4917-332	PLACARD, MAX LOAD
1				D5028-041	PLUG ASSEMBLY
1				D5031-041	LOCK PIN ASSY
2				AN310-4	CASTLE NUT
2				AN4-11	BOLT
4				AN4-13A	BOLT
		20	12	AN4-14A	BOLT
		4	4	AN4-42A	BOLT
		2	2	AN6-13A	BOLT
4	24	16		MS21042L4	NUT
	2	2		MS21042L6	NUT
2				MS24665-151	COTTER PIN
20	40	24		NAS1149F0432P	WASHER
	4	4		NAS1149F0663P	WASHER

DART SERVICE INSTRUCTION
TO AMEND INSTALLATION INSTRUCTIONS D350-607-3 Rev.D,
INSTALLATION INSTRUCTIONS D350-607-4 Rev. C AND
INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ICA-D350-607 REV. 6
REF TCCA STC: SH94-14
REF FAA STC: SR00213NY
REF EASA STC: EASA.10016996
REF BRAZILIAN STC: 2007S03-03/-04/-05/-06

1.0 PURPOSE

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2.0 PARTS LIST:

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					X	D350-607-501	CONVERSION KIT @ CHG 005 OR LATER
				1	1	D3910-5	X-TUBE LUG
				1	1	D3910-7	X-TUBE LUG

(ADD)

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			X		D350-607-419	LIGHTWEIGHT LID KIT (SHORT)
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		1	1	D3910-7	X-TUBE LUG

(ADD)

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: 
D. SHEPHERD (DE # 02)

DATE: 14.05.16
CERT. NO.: SH94-14
ISSUE NO.: 6

A	NEW ISSUE	AJS	14.05.16
REV.	DESCRIPTION	BY	DATE
DESIGN	AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED		DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9699	SHEET 1 OF 2
APPROVED		TITLE	SCALE
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